

Year-round maintenance, planning keep UWO warm in brutal cold

by Mandy Potts - Wednesday, January 22, 2014

<http://www.uwosh.edu/today/31410/year-round-maintenance-planning-keep-uwo-warm-in-brutal-cold/>

Until a couple of weeks ago, most people had never heard the term “polar vortex.”

Now, it is common knowledge to just about anyone. That goes for anyone on the University of Wisconsin Oshkosh campus, too. The phenomenon has struck for a second time this young year.

Thanks to a team of facilities and mechanical staff at UW Oshkosh, the buildings on campus—more than 50 in all —are kept safe and warm despite the deep freeze. Indoor spaces are a safe place to be, even when the cold reaches records lows (or low-highs) outside.

Keeping the UW Oshkosh campus warm during any cold weather situation isn’t really about planning for the extra-cold days. It’s about planning for the *everyday*, according to some of the most experienced facilities management and heat plant operators on campus.

“We are in the business of making sure we have a good preventative maintenance plan in place,” said Rick VanDrisse, mechanical supervisor at UW Oshkosh. “Throughout the year, we make sure the mechanical pieces are working properly so when the cold strike, we don’t have to react.”

Due to stellar planning and continuous commitment to updates on equipment as necessary, the early January cold-snap came and went without a hitch. As do most of the cold-snaps, snow storms and other weather situations.

“Really, during weather situations, we meet in the mornings to discuss with the team how everything is working and we then spend our day responding to people’s concerns about being cold,” said VanDrisse, adding that just because people are cold does not mean the heat is broken. “Our main objective is to keep people as warm and as comfortable as possible. Faculty and staff need workable spaces and students need livable spaces.”

Over the few days of extremely low temperatures and record-low wind chills earlier this month, more than 30 calls were placed due to the cold, which was up about 50-70 percent when compared to a “normal” cold day, VanDrisse said.

VanDrisse and his team spend the day reacting to the calls for service, getting campus community members and visitors comfortable. Planning and preparation make for welcome triage compared to the alternative: reacting to unpredictable catastrophes like no heat in buildings or burst pipes, he said.

A heat plant right on the UW Oshkosh campus, which is staffed 24 hours per day, seven days per week, is, in part, responsible for keeping students, faculty and staff warm and safe at all times, said Chuck Hermes, superintendent of buildings and grounds at UW Oshkosh.

“Having a centralized plant is more efficient than having boilers in each building,” Hermes said.

The University also has a computerized energy-management system, which makes it possible for each building to be monitored from Campus Services, located just off of campus on the south side of the Fox River.

At the heating plant, buildings on the University campus are warmed by a combination of coal, fuel oil and gas in four boilers, each burning different fuel types. During the early January polar vortex, usage was at an all-time high; in one day alone, more than 84 tons of coal were burned (equivalent to four semi trucks), 13,000 gallons of fuel oil were used and about 744,000 cubic feet of gas was used (an amount that could heat about 3,900 homes), Hermes said.

Gas is the most efficient heating source, but many times on extra cold days, like the ones recently, the city’s public service entity puts a cap on how much gas can be used, forcing campus to switch to coal and oil -- technically more expensive to heat with. During the recent cold snap, restrictions on gas were in place after about 24 hours of increased energy use.

Hermes said while it's critical to understand the level of resources need to keep people warm, it does not come at the expense of the University’s sustainable vision and commitment. Efficiency is key.

“We don’t want to waste energy, but we do have to make sure people are comfortable in the cold,” he said. “As we replaced pieces and systems through the University, we’re always replacing with the most energy efficient solutions. This helps us stay up to date.”

Evan Schwalbe, UW Oshkosh heating plan superintendent, said part of the role of heating campus is actually “protecting state property.” It is a responsibility facilities team members don't take lightly.

“Keeping buildings from freezing so pipes don’t freeze and burst is huge,” he said. “It’s important to have a good staff helping us with all of this so we aren’t dependent on outside agencies to come in and help.”

During the last cold spell, UW Oshkosh, unlike some other institutions, did not suffer from any freezing pipes.

“We were pretty proud of that, and we attribute it to good maintenance,” VanDrisse said.

Read more:

- ['Be safe, be warm;' Snows activate dedicated UWO grounds crew](#)